

XXV. *Descriptions of the Pyralidæ, Crambidæ, and Phycidæ collected by the late T. Vernon Wollaston in Madeira.* By GEORGE T. BETHUNE-BAKER, F.L.S.

[Read Oct. 17th, 1894.]

My former notes on Mr. Wollaston's lepidopterous collections in Madeira dealt only with Macro-lepidoptera, the present paper will therefore treat of the Pyralidæ and Phycidæ (Lord Walsingham having most kindly catalogued the Pterophoridaæ, Tortricidæ, and Tineidæ). I shall, as before, follow the arrangement of Staudinger's catalogue.

Aglossa cuprealis, Hb.

Common, very variable in size, the smallest specimen being barely 16 mm., or less than half the size of two or three of the largest. All are dark, strongly-marked examples.

Asopia farinalis, L.

Not uncommon around Funchal.

Scoparia decorella, Sttn.

Described by Stainton in the Ann. and Mag. Nat. Hist., 3rd ser., 1859, p. 210, thus:—

"Alis anticis albidis, striga anteriore recta latiuscula, striga posteriore tenui arcuata et indentata, externe late saturate fusco marginata, signo ♂ ochraceo expleto spatio ante marginali angusto albo. Exp. al. 8 l. In the sharp contrast of colour, this resembles *E. resinea*; but from that species it is abundantly distinct by the form of the second striga, the distinct white submarginal space and the ochreous filling up of the mercurial marking. Inhabits Madeira proper."

This species, though like *resinea*, is also very close to *lineola*; its proper position will therefore be between these two species.

Scoparia frequentella, Sttn., and var. *Concinnella*, Curtis.

I have before me both typical specimens and Curtis's variety, in which the whole of the central area is dark.

Scoparia scoriella, Woll. (Zell. in litt.).

Described by Wollaston (Ann. and Mag. Nat. Hist. 1858, 3rd ser., I., p. 119) as follows:—

"Alis anticis subangustis, pulverato fuscis, strigis duobus tenuibus arcuatis externe latius fusco-marginatis, signo ♂ obscurius expleto; spatio ante-marginali latiusculo, superius nigro-lineato, posterioribus fusco-cinereis. ♂ ♀ exp. alar. vix 11 lin. Inhabits Madeira proper, occurring in similar spots; to the last-mentioned species"^{*} (*i.e.*, to the next species following this, *viz.*, *stenota*).

This is a somewhat darker insect than the following, but may be differentiated by the first line being toothed interiorly, not exteriorly, whilst the whole of the space from the second line to the hind margin is entirely dark. The secondaries are brownish grey. Exp. alar. 20 mm.

A rarer insect than *stenota*.

Scoparia stenota, Woll. (Zell. in litt.).

Described by Wollaston in the same work and on the same page as the preceding, thus:—

"Alis anticis angustis apice acuto. Strigis duabus albidis postice late nigricanti-marginatis, priore acute fracta posteriore tenui biarcuata punctis duobus nigris cum striga, prioris umbra confluentibus signo ♂ obliquo posterioribus cano-albidis. Exp. alar. vix 11 lin. Inhabits Madeira proper; abounding in grassy spots, chiefly of a rather lofty elevation."

This species is fairly constant in markings. The colour of the wings is grey, the primaries in fresh specimens being almost entirely covered with very dark scales, the two transverse lines are white, the first acutely-toothed posteriorly, the second doubly arcuate, and dentated interiorly, both are broadly margined on the outside with blackish. A small black dot is in the centre of the wing,

* Ann. and Mag. Nat. Hist. 1858, 3rd ser., I., p. 119.

followed below, but nearer to the base, by a short blackish dash, extending into the tooth of the first transverse line. Apex subacute, ♀ with very much narrower wings than ♂. Hind wings silver grey. Exp. alar. ♂ 18–20 mm.; ♀ 15 mm. The ♀ is generally decidedly darker than ♂. This species will follow *angustea*.

Scoparia wollastoni, n. sp.

Primaries white, the two transverse lines irregular, each inclined towards the centre, a very limited portion of base black, followed up to the first line by greyish greenish yellow; central area black, sprinkled plentifully with scales of the aforesaid greenish ochreous colour, with which the upper part of the fairly distinct mercurial mark is also filled. Beyond the posterior line and right up to margin, the wing is entirely of this same colour, which in this larger area assumes a lustrous appearance. At the apex near the costa, and also at the anal angle, there is a plentiful sprinkling of super-imposed dusky scales; near the apex and also at the anal angle are two crescentic white marks close to the posterior margin. Fringes grey, paler at extremities. The wings are rather broad and somewhat rounded at the apex. Secondaries translucent grey.

One specimen from Madeira; abdomen broken, but probably from the antennæ a ♂. Mr. Meyrick says of this species, "Quite new to me, and a fine species."

Hellula undalis, F.

Fairly common; one specimen labelled Funchal, others without definite locality.

Botys sanguinalis, L., var. *Hæmatalis*.

One beautifully deep pink and yellow example; parent form not rare.

Botys polygonalis, Hb.

Abundant at low and intermediate elevations.

Botys asinalis, Hb.

One unusually large example.

Botys maderensis, n. sp.

♂ Primaries bright umber-brown, the dark basal line just before the orbicular very interrupted; orbicular stigma fairly distinct, finely encircled by a dark line; reniform stigma very distinct, finely encircled with blackish, and filled in with dark grey. The subterminal transverse curved line is composed of a series of dark grey scallops, interrupted at each nervure, and preceded by a dark dot, the scallops and dots being most distinct in the middle; a fine shading of the ground colour follows these markings, from whence, up to the posterior margin, the whole of the space is filled in with very dark grey, getting paler near the margin, which (margin) is dotted with blackish at the termination of each vein. Antennæ sub-pubescent. Fringes dark grey, with paler extremities and a pale dividing line. Secondaries uniform dark greyish umber, darker near posterior margin, which is darkly dotted as in primaries; fringes as primaries. Exp. alar. about 32 mm.

The ♀ differs in no respect from the ♂ beyond being duller in hue; antennæ simple. This species is nearest Walker's *Scopula delineatalis*, from St. Helena. It can, however, at once be recognized by its uniformly dark secondaries, which in *delineatalis* are whitish, very broadly and darkly bordered; the latter is also of a smaller size.

Seven specimens in both sexes.

Botys atlanticum, n. sp.

Primaries uniform pale ochreous grey, with a small dark grey dot about the centre of the upper part of the discoidal cell, and another at the upper extremity, whilst directly beyond the lower extremity is a large conspicuous dark grey spot. The sub-terminal line is represented by a curved row of dark grey small dots, one on each nervure, from the sub costal to the 3rd median; the termination of each of the veins in both wings is darkly dotted. Fringes same colour as wings. Antennæ simple. Secondaries rather darker grey, with a dark grey border, broad at the apex, but disappearing gradually at the anal angle. In the centre of discal cell is an irregular dark grey spot. Fringes whitish. One ♀ specimen. Exp. alar. 33 mm.

I know of no species at all like this insect, but it

evidently belongs to the same sub-division as the preceding species.

Botys ruficostalis, Ld.

One specimen from Madeira, and I have recently received others from this island.

Botys numeralis, var. *Illutalis*, Guen.

There are five specimens of a *Botys* very nearly allied to *numeralis*. Guenée says his species may be a local variety of it, and it is possible my specimens may be the same; at any rate, I shall temporarily place them under this name.

Nomophila noctuella, Schiff.

Common up to 2000 feet.

Margarodes unionalis, Hb.

Not uncommon.

Diasema ramburialis, Dup.

Fairly common.

Crambus atlanticus, Woll.*

"*Alis anticis apice acutis, saturate griseo-ochreis, costa anguste albida, dorso basim versus albido, vitta centrali albida a basi perducta, pone medium in ramos, fracta plagaque fusca interrupta, plaga hæc postice nigro et albido marginata est; palpis longiusculis; antennis filiformibus, nec pectinatis; capite vittaque centrali thoracica albis. Exp. alar. 13 lin. Inhabits Madeira proper; abounding in grassy spots during the summer months at intermediate and lofty elevations.*"

Primaries greyish ochre, with a moderately broad white longitudinal stripe from base to four-fifths length of wing, which broadens outwards, and, as the short diagnosis says, is broken into veins towards the costa, between which are dark dustings (visible only in fresh specimens); the ground colour from this stripe to the

* Ann. and Mag. Nat. Hist., 1858, 3rd ser., I., p. 119.

inner margin is very much darker, often, in fact, ochreous brown. "Costa anguste albida." This is not at all constant. Hind margin darkly dotted. Fringes grey, with a double dividing line. Secondaries brownish grey, dark at the apex, becoming quite pale near the anal angle. Fringes whitish, with a dividing line. Palpi as long as head and thorax, white above, head white, thorax white, with chestnut patagiae; abdomen same colour as secondaries. The ♀ is similar to the ♂, but somewhat paler.

This species belongs to the *tristellus* and *selasellus* group, but is a finer and handsomer insect.

Enomene ocellæa.

I have in Wollaston's collection two fine specimens, and have recently received others from Madeira.

Myelois cinerella, Sttn.

There are two fine specimens of this insect in the National Museum. Mr. Stainton says (Ann. and Mag. Nat. Hist. 1859, 3rd ser., III., p. 211) it is not closely allied to any known species, and inhabits the Northern Dezerta. His diagnosis is as follows:—

"Alis anticis angustulis dilute griseo-ochreis, fusco valde suffusis striga priore obliqua, posteriore sinuata, ciliis dilute griseo-ochreis. Exp. alar. 10—11 lin. An obscure-looking insect, not closely allied to any known species; the labial palpi are unusually short, and the median vein of the posterior wing is trifid, as in *M. compositella*."

Ephestia quidiella, Mill.

A few specimens, which present no unusual features.

Ephestia interpunctella, Hb.

Abundant at Funchal.

Galeria melonella, L.

Common; one specimen is very remarkable, being almost black.

Achræa grisella, F.

One or two specimens, which differ in no way from the ordinary type.